International application No. PCT/KR2004/003388

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 H01L 21/3065

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 C23C 16/00, H01L 21/02, 21/3065, H05H 1/46

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched KOREAN PATENTS AND APPLICATIONS FOR INVENTION SINCE 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) KIPONET

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
JP 08-88190 A(NEC CORP) 02 APRIL, 1996 See the whole document	1-13
JP 2002-9060 A(MATSUSHITÄ ELECTRIC IND CO LTD) 11 JANUARY, 2002 - See the whole document	1-13
US 6,076,482 A(APPLIED MATERIALS, INC.) See the whole document	1-13
JP 11-312667 A((MATSUSHITA ELECTRON CORP) See the abstract	1-13
KR 2004-15604 A(ADAPTIVE PLASMA TECHNOLOGY CORP) 19 FEBRUARY, 2004 See the abstract	1-13
KR 2005-5717(ADAPTIVE PLASMA TECHNOLOGY CORP) 14 JANUARY, 2005 See the whole document	1-13
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Further documents are listed in the continuation of Bo	ox C	of	continuation	the	sted in	ате	documents	Further	
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See patent family annex.

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Date of the actual completion of the international search

27 APRIL 2005 (27.04.2005)

Date of mailing of the international search report

28 APRIL 2005 (28.04.2005)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

KIM, Kap Byung

Telephone No. 82-42-481-5730



Information on patent family members

International application No.
PCT/KR2004/003388

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 08-88190 A	02-04-1996	US 5690781 A	25–11–1997
JP 2002-9060 A	11-01-2002	NONE	
US 6,076,482·A	20-06-2000	NONE	•
JP 11-312667 A	09-11-1999 	US 6274502 A	14-08-2001
KR. 2004-15604 A	19-02-2004	NONE	
KR 2005-5717 A	14-01-2005	NONE .	

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Ш	Further	documents are	listed in	the continua	tion of .	Box C.
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JP 2002-9060 A	11-01-2002	NONE	
US 6,076,482 A	20-06-2000	NONE	
JP 11-312667 A	09-11-1999	US 6274502 A	14-08-2001
KR 2004-15604 A	19-02-2004	NONE	
KR 2005-5717 A	14-01-2005	NONE _.	
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